

## WHAT IS CLAIMED IS:

1. A woodchuck infected with bovine viral diarrhea virus.
2. The woodchuck of claim 1, wherein the virus is a noncytopathogenic isolate.
3. An isolated woodchuck cell infected with bovine viral diarrhea virus.
4. The cell of claim 3, wherein the virus is a noncytopathogenic virus.
5. The cell of claim 3, wherein the cells are in a solution.
6. The cell of claim 5, wherein the solution is a growth medium containing a nutrient supplement selected from the group consisting of fetal bovine serum, horse serum, and cytokines.
7. A method for identifying a compound for the treatment of Flaviviridae infection comprising:
  - a) administering a test compound to a woodchuck infected with bovine viral diarrhea virus; and
  - b) determining whether the test compound inhibits bovine viral diarrhea virus in the woodchuck.
8. A method for identifying a compound for the treatment of a Flaviviridae infection comprising:
  - a) administering a test compound to a first woodchuck infected with bovine viral diarrhea virus;
  - b) administering a control compound to a second woodchuck infected with bovine viral diarrhea virus; and
  - c) selecting the test compound that inhibits bovine viral diarrhea virus in the first woodchuck more than the control inhibits the virus in the second woodchuck.

9. A method for identifying a compound for the treatment of a Flaviviridae infection comprising:

a) administering a test compound to a first woodchuck infected with bovine viral diarrhea virus;

b) infecting a second woodchuck with bovine viral diarrhea virus; and

c) selecting the test compound that decreases the load of bovine viral diarrhea virus in the first woodchuck over the viral load in the second woodchuck.

10. The method of claim 7, wherein the Flaviviridae is hepatitis C.

11. The method of claim 8, wherein the Flaviviridae is hepatitis C.

12. The method of claim 9, wherein the Flaviviridae is hepatitis C.

13. The method of claim 7, 8 or 9, wherein the inhibition of bovine viral diarrhea virus is determined by monitoring the activity of liver enzymes.

14. The method of claim 7, 8 or 9, wherein the inhibition of bovine viral diarrhea virus is determined by assessing the level of bovine viral diarrhea virus antigens present in serum.

15. A method for identifying a compound for the treatment of a Flaviviridae infection comprising:

a) administering a test compound to a woodchuck cell infected with bovine viral diarrhea virus; and

b) determining whether the test compound inhibits the bovine viral diarrhea virus in the woodchuck cell.

16. A method for identifying a compound for the treatment of a Flaviviridae infection comprising:

a) administering a test compound to a first woodchuck cell infected with bovine viral diarrhea virus;

- b) administering a control compound to a second woodchuck cell infected with bovine viral diarrhea virus; and
- c) determining whether the test compound inhibits bovine viral diarrhea virus in the first woodchuck cell more than the control compound inhibits bovine viral diarrhea virus in the second woodchuck cell.

17. The method of claim 15 or 16 wherein the inhibition of bovine viral diarrhea virus is determined by assessing the level of bovine viral diarrhea virus proteins secreted in culture, detecting viral RNA expression, or detecting viral proteins expressed on cell membranes.
18. The method of claim 15, wherein the infection is a hepatitis C viral infection.
19. The method of claim 16, wherein the infection is a hepatitis C viral infection.